Application No. 10/828,637 Discket No. 14374-54 Reply to Office Action mailed November 1, 2005

REMARKS

This paper is presented in response to the Office Action. By this paper, claims 1-2, 12-14, 18-24 and 26-29 are canceled, claims 3-11, 16-17 and 25 are amended, and new claims 30-33 are added. Claims 3-11, 15-17, 25 and 30-33 are now pending in view of the aforementioned cancellations and new claims.

Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks. For the convenience and reference of the Examiner, the remarks of Applicant are presented in the order in which the corresponding issues were raised in the Office Action.

1. General Considerations

Applicant notes that the remarks and amendments presented herein have been made merely to clarify the claimed embodiments from elements purported by the Examiner to be taught by the cited references. Such remarks, or a lack of remarks, and amendments are not intended to constitute, and should not be construed as, an acquiescence, on the part of the Applicant: as to the purported teachings or prior art status of the cited references; as to the characterization of the cited references advanced by the Examiner; or as to any other assertions, allegations or characterizations made by the Examiner at any time in this case. Applicant reserves the right to challenge the purported teaching and prior art status of the cited references at any appropriate time.

In addition, the remarks herein do not constitute, nor are they intended to be, an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed herein are presented solely by way of example. Consistent with the foregoing, the discussion herein is not intended, and should not be construed, to prejudice or foreclose contemporaneous or future consideration, by the Applicant, of additional or alternative distinctions between the claims of the present application and the references cited by the Examiner, and/or the merits of additional or alternative arguments.

H. Objection to Claims 12, 23 and 29

The Examiner has objected to claims 12, 23 and 29 on various grounds. In view of the fact that those claims have been canceled herein, Applicant submits that the objection is most and should be withdrawn.

111. Rejection of Claims under 35 U.S.C. § 102

Applicant respectfully notes that a claim is anticipated under 35 U.S.C. § 102(a), (b), or (e) only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single

Application No. 10/828,637 Docket No. 14374.54 Reply to Office Action mailed November 1, 2005

prior art reference. Further, the identical invention must be shown in as complete detail as is contained in the claim. Finally, the elements must be arranged as required by the claim. MPEP § 2131.

A. rejection of claims 1, 2, 4, 7, 9 and 10 based on US 6,333,969

The Examiner has rejected claims 1, 2, 4, 7, 9 and 10 under 35 U.S.C. § 102(b) as anticipated by US 6.333,969 to Kujirai ("Kujirai"). Applicant respectfully disagrees.

Applicant notes at the outset that claims 1 and 2 have been canceled by this paper. Accordingly, the rejection of those claims is most and should be withdrawn.

The Exammer has indicated that claim 3, from which claims 4, 7, 9 and 10 depend, would be allowable if rewritten to include all the limitations of the base claim and any intervening claims. By this paper, Applicant has amended claim 3 in the manner suggested by the Examiner and, accordingly, claim 3 is believed to be in allowable condition. Inasmuch as claims 4, 7, 9 and 10 depend from claim 3, claims 4, 7, 9 and 10 are likewise believed to be in allowable condition and, accordingly, the rejection of claims 4, 7, 9 and 10 should be withdrawn.

B. rejection of claims 1, 2, 5, 6 and 8 based on US 6,356,619

The Examiner has rejected claims 1, 2, 4, 7, 9 and 10 under 35 U.S.C. § 102(b) as anticipated by US 6,356,619 to Nagy ("Nagy"). Applicant respectfully disagrees.

Applicant notes at the outset that claims 1 and 2 have been canceled by this paper. Accordingly, the rejection of those claims is moot and should be withdrawn.

The Examiner has indicated that claim 3, from which claims 5, 6 and 8 depend, would be allowable if rewritten to include all the limitations of the base claim and any intervening claims. By this paper, Applicant has amended claim 3 in the manner suggested by the Examiner and, accordingly, claim 3 is believed to be in allowable condition. Inasmuch as claims 5, 6 and 8 depend from claim 3, claims 5, 6 and 8 are likewise believed to be in allowable condition and, accordingly, the rejection of claims 5, 6 and 8 should be withdrawn.

C. rejection of claims 11-22 based on JP 402239555

The Examiner has rejected claims 11-22 under 35 U.S.C. § 102(b) as anticipated by JP 402239555 to Hosokawa ("Hosokawa"). Applicant respectfully disagrees.

Applicant notes at the outset that claims 12-14 and 18-22 have been canceled by this paper. Accordingly, the rejection of those claims is most and should be withdrawn.

With regard first to independent claim 11, Applicant has amended that claim herein to recite "a filament disposed substantially within the slot, the filament taking one of the following forms: a helically wound wire configured such that a diameter of the filament varies along a longitudinal axis defined by the filament, the variances in diameter being substantially symmetrically arranged with respect to a

Application No. 10/828,637 Dacket No. 14,74.54 Reply to Office Action mailed November 1, 2005

predetermined location on the longitudinal axis; a helically wound wire whose pitch varies along a longitudinal axis defined by the filament, the variances in pitch being substantially symmetrically arranged with respect to a predetermined location on the longitudinal axis; and a helically wound wire whose diameter varies along a longitudinal axis defined by the filament, the variances in diameter being substantially symmetrically arranged with respect to a predetermined location on the longitudinal axis." Support for this amendment can be found in the specification at, for example, Figures 5a - 7b.

However, the Examiner has not established that *Hosokawa*, or any other cited reference, teaches or suggests the claimed filament configurations. For example, as presently understood, Figure 6 of *Hosokawa* appears to be concerned with asymmetric variances in a filament geometry.

In light of the foregoing discussion, Applicant respectfully submits that the Examiner has not established that *Hosakawa* anticipates claim 11, at least because the Examiner has not established that each and every element as set forth in claim 11 is found in *Hosakawa*, and because the Examiner has not established that the identical invention is shown in *Hosakawa* in as complete detail as is contained in claim 11. Applicant thus respectfully submits that the rejection of claim 11, as well as the rejection of corresponding dependent claims 15 and 16, should be withdrawn.

Turning now to independent claim 17, Applicant notes that the rejection of claims 17-22 is based in part upon an allegation that *Hosokuwa* discloses "... wherein varying the rate at which electrons are emitted comprises varying an electrical field strength in selected areas proximate the filament; and wherein varying the rate at which electrons are emitted comprises heating the filament in such a way that some portions of the filament are at a relatively higher temperature than other portions of the filament." However, the Examiner has failed to cite any portion of *Hosokuwa* whatsoever in support of this assertion.

In light of the foregoing discussion, Applicant respectfully submits that the Examiner has not established that *Hosakowa* anticipates claim 17, at least because the Examiner has not established that each and every element as set forth in claim 17 is found in *Hosakawa*, and because the Examiner has not established that the identical invention is shown in *Hosakawa* in as complete detail as is contained in claim 17. Applicant thus respectfully submits that the rejection of claim 17 should be withdrawn.

D. rejection of claims 23, 24 and 26 based on US 2,479,193

The Examiner has rejected claims 23, 24 and 26 under 35 U.S.C. § 102(b) as anticipated by US 2,479,193 to Zabel ("Zabel"). Applicant respectfully disagrees.

Applicant notes that claims 23, 24 and 26 have been canceled by this paper. Accordingly, the rejection of those claims is most and should be withdrawn.

Application No. 10/828,637 Duck t No. 14374.54 Reply to Office Action mailed November 1, 2005

E. rejection of claims 27-29 based on US 4,894,853

The Examiner has rejected claims 23, 24 and 26 under 35 U.S.C. § 102(b) as anticipated by US 4,894,853 to Dovid ("Dovid"). Applicant respectfully disagrees.

Applicant notes that claims 27-29 have been canceled by this paper. Accordingly, the rejection of those claims is most and should be withdrawn.

IV. Allowable Subject Matter

Applicant acknowledges with thanks the indication of the Examiner that claims 3 and 25 would be allowable if rewritten to include all the limitations of the base claim and any intervening claims, and Applicant also wishes to thank the Examiner for the careful review of those claims.

Applicant submits the following comments concerning the Examiner's statements of reasons for the indication of allowable subject matter in the Office Action. In general, Applicant agrees with the Examiner that the inventions to which claims 3 and 25 are directed are patentable over the cited references, but respectfully disagrees with the Examiner's statement of reasons for allowance as set forth in the Office Action.

Particularly, Applicant submits that it is improper to characterize a single limitation, or subset of limitations, as constituting the basis for allowance of a claim. Rather, the patentability of a claim is properly determined with reference to the claim as a whole. Accordingly, Applicant does not concede that the reasons for allowable subject matter given by the Examiner are the only reasons that make, or would make, the claim allowable and Applicant does not make any admission or concession concerning the Examiner's statements in the Office Action concerning the allowability of claims 3 and 25 in view of the cited references.

V. New Claims 30-33

By this paper, Applicant has added new dependent claims 30-33. Inasmuch as claims 30-32 depend from claim 3, believed to be in allowable condition for at least the reasons set forth herein, claims 30-32 are likewise believed to be in allowable condition.

Further, claim 33 depends from claim 11 and, accordingly, claim 33 is believed to be in allowable condition for at least the reasons set forth herein.

Application No. 10/828,637 Docket No. 14174,54 Reply to Office Action mailed November 1, 2005

CONCLUSION

In view of the remarks submitted herein, Applicant respectfully submits that each of the pending claims 3-11, 15-17, 25 and 30-33 is in condition for allowance. Therefore, reconsideration of the rejections is requested and allowance of those claims is respectfully solicited. In the event that the Examiner finds any remaining impediment to a prompt allowance of this application that could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate the same with the undersigned attorney.

Dated this / day of March, 2006.

Respectfully submitted,

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